

1 ABSTRACT

2 The present invention provides an apparatus and method for
3 automated and rapid loading of a large number of samples for mass
4 spectrometric analysis using various ionization methods (e.g.
5 matrix assisted desorption by laser bombardment (MALDI) and
6 atmospheric pressure ionization (API) methods such as
7 electrospray). The apparatus utilizes microtiter plates to hold
8 the sample, optical elements (e.g. fiber optic) to facilitate
9 automated transport of the ions, and a multiple part capillary
10 comprising at least two capillary sections joined with airtight
11 seal by a union for use in mass spectrometry (particularly with
12 ionization sources) to transport ions between pressure regions of
13 a mass spectrometer for analysis is described herein. Preferably,
14 the capillary is useful to transport ions from an elevated
15 pressure ionization source to a first vacuum region of a mass
16 analysis system.